

Digital Connection

Don Rotolo, N2IRZ

Internet Archive, and Other Bits

This document ©2023 by Don Rotolo N2IRZ under CC BY-NC 4.0. To view a copy of this license, visit <https://creativecommons.org/licenses/by-nc/4.0/>.

This document was donated to the Digital Library of Amateur Radio & Communications (DLARC) for public access. It differs slightly from what appeared in *CQ Amateur Radio Magazine*.

Originally in CQ Magazine, January 2023

All the very best wishes to you and yours for a happy, healthy and prosperous New Year. As one of my New Year's resolutions, I need to clean up and mention a couple of topics that have been on the back burner for some time. There's not much else going on at the moment, so this month will be a little shorter than usual.

Internet Archive

Last November I wrote about the ARRL/TAPR DCC, and one of the topics there was the Internet Archive <<https://archive.org>>, the 501(c)(3) nonprofit organization behind the Wayback Machine. The IA is an online library of sorts, providing free access to anyone who wants it. Their collection includes a lot of everything, and their official mission is to provide Universal Access to All Knowledge. And that statement isn't just fluff: They have 625 billion web pages, 38 million books and texts, and millions and millions of audio recordings, videos, images and software programs.



North East Digital Association

N.E.D.A. Devoted to Packet
Networking in the
North East

Welcome to the **North East Digital Association (NEDA)** WWW Home Page.

Photo 1: The North East Digital Association (NEDA) homepage as it looked on Christmas day in 1996, courtesy of the Internet Archive's Wayback Machine. Although they store lots of old web pages, the Internet Archive is also interested in amateur radio related publications, like the club newsletters up in your attic. You can preserve them for posterity and get them out of the house at the same time!

One might think that with all that stuff (over 99 Petabytes!), they'd be kinda full and satisfied, but no: They want more. Lots more. At the DCC

they made a specific appeal to the amateur radio community, they are actively seeking old and new publications, club newsletters, operating instructions and schematics, service books, and anything else ham related.



Photo 2: One my latest projects, a portable antenna support for field day. The crane is optional.

For my part, I'm in the process of scanning in all the North East Digital Association (NEDA) and Radio Amateur Telecommunications Society (RATS) publications I can find. These two organizations, in which I was an officer for some time, represent quite a lot of knowledge about packet radio networking starting in the early 1980s.

So, if you have anything that might be considered part of All Human Knowledge, create a free account and upload it. It doesn't have to be today, but really give it some serious thought, since it's entirely possible that you have the only surviving copy of something getting dusty on a shelf there. They also accept physical donations, but can neither return them after digitizing nor specify when digitization might happen. Of course, they do ask that you check if they already have a copy of something before sending it in – just like in contesting, de-duping is important.

Out With The Old...

And in with the new. Yes, it's a new year – been there, done that – but what about you? Is there something new you want to explore this year? Maybe get an inexpensive computer-radio interface and try something digital? Maybe a new contest mode? Or – get this – a digital mode contest!

If you have long lusted after DXCC, try the FT8 digital mode. There is a lot of activity on the bands, and the robustness of this popular digital mode makes it far easier to work new countries with even a modest setup. Or WAZ, WAC, WAS and the other awards: Maybe this will be your year? You won't know until you give it a try. Consider this one of your new year's resolutions.



Photo 3: Members of FRC Team 823, Team OSCAR, work on some last-minute adjustments to their robot. Share your life experience by helping mentor a high-school robotics team. Sharing your knowledge is a valuable service to society and is very rewarding.

FRC

Over the years I've written about FIRST Robotics. While they have robotics competitions for students from pre-K through 12th grade, my own involvement is with the First Robotics Competition (FRC), which is for high-schoolers.

The nearly 4,000 teams worldwide, with almost 100,000 students, have only a few weeks to design and build a ~120 lb. robot to compete in a new game every year, which is announced in early January. Which, you might notice, is right now.

Wherever you are, there is very likely a team near by that could use your expertise and help. An important part of FIRST (For Inspiration and Recognition of Science and Technology) is its reliance on adult mentors to help guide students and transfer knowledge. Some teams have several excellent mentors, but many teams could definitely use a few more.

As a ham, you probably have quite a lot of relevant knowledge that can help a team. Who knows, maybe some of those students might be interested in getting their radio license? But at the very least, everyone has something good to teach to a high-schooler. It's not a year-round commitment, just a few weeks, and the reward is the immense satisfaction of seeing all those little light bulbs above their heads switch on and burn brightly.

I've been an FRC mentor since 2005, and I believe in the impact this program has. I've seen kids who (literally) had never held a screwdriver grow and get a degree in mechanical engineering. These are the kids who are going to invent a machine to save my life someday. And, if you are expecting the typical high school student, be advised that these kids are different – very intelligent, highly motivated, eager to learn, and immensely grateful.

So, consider this your personal invitation to find a local FRC team and ask if they could use some help. Visit the FIRST website <<https://www.firstinspires.org>>, click on Find FIRST Near You and connect with a team. Trust me, you'll be glad you did.

Unselfishness

Speaking of sharing your life experiences, it doesn't have to be my passion of FRC. Instead, what is your passion? Think you might be able to get one – just one – kid under 18 to get their radio license this year? Or teach someone to fish, or use a drill press, name that bird, or nurture those tomatoes, or... well, you get the idea. You have a lifetime of unique experiences, knowledge and skills that would benefit society if you could pass at least some of on to the next bunch.

Indeed, I am of the mind that not trying to do this is a bit selfish. While I do agree that most people don't really want advice, if you ask and they agree, clearly they do. Our society depends on ever-increasing productivity, and that never happens by the boss telling you how to do something. Instead, we each learn, in little bits (usually), how to make ourselves just a bit more efficient, the work faster or easier or whatever.

TAPR PSR #153 Summer 2022



President's Corner

Another DCC is upon us. This one is our first live conference in three years, and it is shaping up to be a good one. Come visit the DCC in Charlotte, NC on September 16 through 18. This year we are happy to have the Charlotte Digital Radio Group and the Mecklenburg Amateur Radio Society as our local hosts. They have generously sponsored the Saturday morning coffee and pastries for this year's DCC. I would also like to thank ARDC for their sponsorship of this year's DCC. Their quick response and financial help made the DCC possible. And don't forget ARRL, whose support we could not do without. If you aren't a member, why not?



This year's conference will be streamed live via YouTube for those of you who cannot attend in person. We will have moderators monitoring the chat window to field your questions and pose them to the presenters. You will be able to hear their answer via the live stream. The link is available on the TAPR web site, tapr.org.

Other exciting news is that the TangerineSDR hardware is approaching completion. Come see the prototypes in the Demo room or listen to the talks on the various components. We still have a long way to go before we have a complete working radio, but we are getting closer!

Production is complete on the Magnetometer Raspberry Pi Hat, so look for those to become available in the TAPR store shortly after DCC. Again, prototypes will be available to play with in the Demo room.

73,
Scotty WA2DFH

**40th
Anniversary
TAPR 1982-2022**

President's Corner	01
DCC in a Nutshell	02
TAPR Directors Election	02
DCC Schedule	03
DCC Banquet Speaker	07
Proceedings of the DCC	07
Student project enables 33-cm ham experimentation	08
Hamvention 2022 is a Wrap	10
'Hot Welcome to a Foreign Ham in Greece'	23
Write Here!	27
On the Net	27
The Fine Print	28
Our Membership App	29

TAPR is a community that provides leadership and resources to radio amateurs for the purpose of advancing the radio art.

Photo 4: Write something for the TAPR Packet Status register! Visit <tapr.org> to find out how. Surely there is something you can share?

So whether it's FRC, ham radio, or whatever floats your boat, make another resolution this year to give something you have away – and get to keep it too.

And that's my wish for you this year, in addition to health, happiness and prosperity in the new year.

73,
Don N2IRZ



Sidebar:

Dale Heatherington WA4DSY, SK



It is with great sadness that we report the passing of Dale Alan Heatherington WA4DSY on 5 June 2021. As a young engineer, Dale worked with Dennis Hayes to essentially invent the Dial-up Modem. In an interview with N2IRZ (CQ, March 2016) he noted that the problem they solved was of how to end the connection: "When you're sending a file, you don't know what's in the file. You can't designate a particular character as a hang-up character..." The answer to this problem became the basis of the Hayes Command Set, a widely-used set of dozens of commands still used to control virtually all telephone modems.

His professional career aside, Dale also became well-known in the digital amateur radio world from his WA4DSY 56-kilobaud GRAPES radio modem. Able to transfer data at blinding speeds, it was by far the fastest amateur radio modem of its day. Unfortunately, its cost and complexity meant that it was never widely adopted. Dale was also a fierce competitor in game robots.

Images courtesy WA4DSY

###